## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6494179

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date	
XIN RU WANG	01/09/2021	
XINYI ZHENG	06/16/2020	
DOUGLAS R. BURDICK	01/11/2021	
IOANNIS KATSIS	01/11/2021	

### **RECEIVING PARTY DATA**

Name:	me: INTERNATIONAL BUSINESS MACHINES CORPORATION	
Street Address:	NEW ORCHARD ROAD	
City:	ARMONK	
State/Country:	NEW YORK	
Postal Code:	10504	

### **PROPERTY NUMBERS Total: 1**

Property Type	Number	
Application Number:	16847795	

### **CORRESPONDENCE DATA**

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Address Line 4: SOUTHPORT, CONNECTICUT 06890

ATTORNEY DOCKET NUMBER:	P201911960US01	
NAME OF SUBMITTER:	MICHAEL J. COOPER	
SIGNATURE:	/Michael J. Cooper/	
DATE SIGNED:	01/13/2021	
	This document serves as an Oath/Declaration (37 CFR 1.63).	

**Total Attachments: 5** 

PATENT REEL: 054906 FRAME: 0264 source=P201911960US01\_Assignment\_Declaration\_1-13-2021#page1.tif
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PATENT REEL: 054906 FRAME: 0265

# DECLARATION (37 C.F.R. § 1.63) FOR UTILITY PATENT APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. § 1.76) AND ASSIGNMENT

# Title of Invention: COOPERATIVE NEURAL NETWORKS WITH SPATIAL CONTAINMENT CONSTRAINTS

As a below named and undersigned inventor, I hereby declare that:

This declaration is directed to the attached application, or (if following box is checked):

[x] United States application or PCT international application number <u>16/847.795</u> filed on <u>April 14.</u> 2020

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I have reviewed and understand the contents of the application, including the claims.

I am aware of the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 C.F.R. § 1.56.

Whereas, I ("ASSIGNOR") have made certain inventions, improvements, and discoveries (herein referred to as the "Invention") disclosed in the above-identified patent application and further identified by the IBM Docket Number provided above in the header of this document;

Whereas, International Business Machines Corporation (herein referred to as the "ASSIGNEE"), a corporation of New York having a place of business at Armonk, New York, desires to acquire, and I desire to grant to the ASSIGNEE, my entire worldwide right, title, and interest in and to the Invention and in and to any and all patent applications and patents directed thereto;

Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, I hereby sell or have sold, assign or have assigned, and otherwise transfer or have transferred to the ASSIGNEE, its successors, legal representatives, and assigns, my entire worldwide right, title, and interest in and to the Invention, the above-identified United States patent application, and any and all other patent applications and patents for the Invention which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, I hereby authorize and request the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention, to the ASSIGNEE, its successors, legal representatives, and assigns, my entire worldwide right, title, and interest in and to the same to be held and enjoyed by the ASSIGNEE, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by me had this Assignment not been made; and I agree to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the Invention and all related patents and applications, in the ASSIGNEE, its successors, legal representatives, and assigns,

### IBM DOCKET NUMBER: P201911960US01

whenever requested by the ASSIGNEE, its successors, legal representatives, or assigns.

I acknowledge my prior and ongoing obligations to sell, assign, and transfer my rights under this Assignment to the ASSIGNEE and am unaware of any reason why I may not have the full and unencumbered right to sell, assign, and transfer my rights hereby sold, assigned, and transferred, and have not executed, and will not execute, any document or instrument in conflict herewith. I also hereby grant the ASSIGNEE, its successors, legal representatives, and assigns, the right to insert in this Assignment any further identification (including, but not limited to, patent Application Number) which may be necessary or desirable for recordation of this Assignment. This Assignment is governed by the substantive laws of the State of New York, and any disputes will be resolved in a New York state court or federal court sited in New York.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.

(1) Legal Name of Inventor: Ain Ru Wang	
Signature: Yho WC	Date: Jan 9, 2021
(2) Legal Name of Inventor: Xinyi Zheng	
Signature:	Date:
통생활성 이 이 의원이 있는 사람들은 사람들이 되었다. 전공시장이 아이는 사람이 되었다. 소리의 사람이	
(3) Legal Name of Inventor: Douglas R. Burdick	
Signature:	Date:
(4) Legal Name of Inventor: Ioannis Katsis	
Signature:	Date:

whenever requested by the ASSIGNEE, its successors, legal representatives, or assigns.

I acknowledge my prior and ongoing obligations to sell, assign, and transfer my rights under this Assignment to the ASSIGNEE and am unaware of any reason why I may not have the full and unencumbered right to sell, assign, and transfer my rights hereby sold, assigned, and transferred, and have not executed, and will not execute, any document or instrument in conflict herewith. I also hereby grant the ASSIGNEE, its successors, legal representatives, and assigns, the right to insert in this Assignment any further identification (including, but not limited to, patent Application Number) which may be necessary or desirable for recordation of this Assignment. This Assignment is governed by the substantive laws of the State of New York, and any disputes will be resolved in a New York state court or federal court sited in New York.

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(1)	Legal Name of Inventor: Xin Ru Wang	
	Signature:	Date:
(2)	Legal Name of Inventor: Xinyi Zheng	
	Signature: 3 F V2 4	Date:
(3)	Legal Name of Inventor: Douglas R. Burdick	
	Signature:	Date:
(4)	Legal Name of Inventor: Ioannis Katsis	
	Signature:	Date:

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(1) Legal Name of Inventor: Xin Ru Wang	
Signature:	Date:
(2) Legal Name of Inventor; Xinyi Zheng	
Signature	Date
(3) Legal Name of Inventor Douglas R. Burdick	
Signature 1994 / Seculation	Date: 1/11/2/04
(4) Legal Name of Inventor Tourist Katsis	
Signature	O2e

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(1)	Legal Name of Inventor: Xin Ru Wang		
	Signature:	Date:	
(2)	Legal Name of Inventor: Xinyi Zheng		
	Signature:	_Date:	
(3)	Legal Name of Inventor: Douglas R. Burdick		
	Signature:	Date:	
(4)	Legal Name of Inventor: Ioannis Katsis		
	Signature:	Date:	1/11/2021

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